

A. Anthony Bloom
Jet Propulsion Laboratory
4800 Oak Grove Drive,
Pasadena, CA 91109
M/S 233-200
+1 8183545952
abloom@jpl.nasa.gov

Current Position

March 2014 – present: Caltech Postdoctoral Scholar at JPL: global fire and wetland carbon fluxes.

Relevant work history

Dec 2011 – Feb 2014: Post-Doctoral Research Associate in Terrestrial Carbon Cycling. School of Geosciences, University of Edinburgh (UK).

Education

2007 – 2011: University of Edinburgh (UK). PhD – Satellite-Based Estimation of Global Biogenic Methane Emissions

2006 – 2007: University of Leeds (UK). Masters by Research (MRes) – Physics of the Earth and Atmosphere. Research Topic: Analysing and Modelling CO₂ fluxes across the air-sea boundary.

2002 – 2006: University College London (UK). MSci in Earth and Space Science.

Publications

- Bloom, A. Anthony, et al. "Remote sensing constraints on South America fire traits by Bayesian fusion of atmospheric and surface data." *Geophysical Research Letters* (2015).
- Bloom, A. A., and M. Williams. "Constraining ecosystem carbon dynamics in a data-limited world: integrating ecological" common sense" in a model-data fusion framework." *Biogeosciences* 12.5 (2015): 1299-1315.
- Clare, A., Simon S., S. Joseph, J. Hammond, G. Pan, and A. Bloom. "Competing uses for China's straw: the economic and carbon abatement potential of biochar." *GCB Bioenergy* (2014).
- Stavros, E. N., S. Jeong, and A. Bloom. "Synthesizing Remote Sensing Data on the Carbon and Water Cycles." *Eos, Transactions American Geophysical Union* 95, no. 29 (2014): 265-265.
- Hill, T. C., M. Williams, A. A. Bloom, E. T. A. Mitchard, and C. M. Ryan. "Are inventory based and remotely sensed above-ground biomass estimates consistent?" *PloS one* 8, no. 9 (2013): e74170.
- Bloom, A. A., P. I. Palmer, A. Fraser, and D. S. Reay. "Seasonal variability of tropical wetland CH₄ emissions: the role of the methanogen-available carbon pool." *Biogeosciences* 9, no. 8 (2012): 2821-2830.
- Bloom, A. A., J. Lee-Taylor, S. Madronich, D. J. Messenger, P. I. Palmer, D. S. Reay, and A. R. McLeod. "Global methane emission estimates from ultraviolet irradiation of terrestrial plant foliage." *New Phytologist* 187, no. 2 (2010): 417-425.
- Bloom, A. A., P. I. Palmer, A. Fraser, D. S. Reay, and C. Frankenberg. "Large-scale controls of methanogenesis inferred from methane and gravity spaceborne data." *Science* 327, no. 5963 (2010): 322-325.
- Brooks, I. M., A. A. Bloom, B. J. Brooks, J. JN Lingard, J. B. McQuaid, Sarah J. Norris, M. H. Smith et al. "Physical exchanges at the air-sea interface: UK-SOLAS Field Measurements." *Bulletin of the American Meteorological Society* 90, no. 5 (2009): 629-644.
- Bloom, A., V. Kotroni, and K. Lagouvardos. "Climate change impact of wind energy availability in the Eastern Mediterranean using the regional climate model PRECIS." *Natural Hazards and Earth System Science* 8.6 (2008): 1249-1257.